

## Waterproofing

### ACCESSIBLE FLAT ROOFS

#### TECHNICAL PROBLEMS

Concrete slabs can crack and stagnant water, for lack of any slope, can accumulate on flat roofs. What's more, a technical sealant solution must allow for foot traffic and resist being damaged by tables and chairs.

#### TRADITIONAL SOLUTION

##### • New buildings:

Laying a multi-layer sealant system with mechanical protection from concrete slabs on a bed of sand, or concrete screeding poured directly onto the sealant. Installing the floor covering directly onto the concrete screeding.

##### • The drawback:

The sealant layer is not accessible, and it is difficult to identify any leaks. Restoration requires major structural work.

##### • Renovations:

The concrete slab must be broken, and the existing sealant layer must be removed before any restoration.

#### SOUPLETHANE TECHNIQUE

SOUPLETHANE is applied directly to the concrete slab, at a thickness of approximately 1.5mm.

A non-slip finish is applied by sprinkling corundum onto the topcoat.

The sealant is applied as an unbroken layer, including at the expansion joints.

##### • The benefits:

SOUPLETHANE does not require mechanical protection and can withstand perforation and foot traffic (up to 600 kg/cm<sup>2</sup>).

The sealant layer adheres to the concrete, preventing water penetrating any cracks between the sealant and the support. Any leaks can be immediately identified and easily repaired.

SOUPLETHANE can bridge cracks in the concrete up to 2mm across.

It is easy to maintain and repair. SOUPLETHANE is UV-resistant and comes with a ten-year seal guarantee.

#### TESTS AND CERTIFICATIONS

- Bridges and roads: STER81: bridges cracks of 2 mm across
- Compression resistance: 113 MPa
- UV resistance: SNCF testing for engineering structure certification



#### SPECIFICATION

##### • prepare the substrate:

- . Sand and dust the concrete.

##### • apply SOUPLETHANE

Base hardener concrete primer (1 litre per 7m<sup>2</sup>)

- Apply SOUPLETHANE 5: apply a thickness of 1.5mm with a non-slip finish provided by corundum
- Bridge any expansion joints with glass fabric coated with SOUPLETHANE. Apply manually (with a roller) or spray it on with a high pressure, twin component airless machine.

#### QUALITY CONTROL

- Make a visual check of the film quality (no blisters, good polymerisation).
- Check that any weak points have been properly treated (raised sections, joints, etc.). Check that the minimum required thickness has been applied.
- Ensure that the surfacing is sufficiently non-slip.

#### WORK REFERENCES

- Bouygues
- Voskian (architect)
- Boquet (architect)
- Daufresne Cabinet
- G.A.N.

- Resistance: UV and chemicals (Bridges and Roads Laboratory, SGN Laboratory, Rhône Poulenc).
- CSTB E.T.E. tested